PREFACE

The San Joaquin River Basin covers a 11,000 square mile area in Central California. The San Joaquin River, traversing the eastern side of the basin, extends from glacial lakes in the Sierra Nevada to its mouth in the Delta. The principal tributaries to the San Joaquin River are the Stanislaus, Tuolumne, Fresno, Calaveras, Chowcilla, and Merced Rivers.

Historically, the basin has been subject to floods occurring during late fall and winter months primarily as a result of prolonged rain, as a result of rapid melting of the winter snowpack in the Sierra Nevada. Historically, the main channel of the San Joaquin River and its tributaries would often overtop their banks. One of the earliest recorded floods was the great winter flood of 1861-1862. During this flood, waters of the San Joaquin and Sacramento Rivers spilled over their banks, forming an inland sea covering an area 250 to 300 miles long and 20 to 60 miles wide. Long recognized for its flood potential the San Joaquin River has been studied since before the turn of the century.

The existing flood control improvements on the San Joaquin River includes a complex system of levees, dams, and bypass canals. The Flood Control Act of 1944 authorized most of the existing flood control system. Authorizing a series of dams and reservoirs, as well as construction levee and increasing, channel capacity this act led to the construction of most of the existing flood control improvements. A reduction in floodway capacity has occurred since the 1940's and 1950's when the system was originally constructed. Because socioeconomic conditions and the uses of natural resources have changed over time, the flood control system requires evaluation, improvment, and maintenance to reflect correct needs and conditions.